AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A conjugate comprising

a) a trifunctional cross-linking moiety selected from the group consisting of triaminobenzene, tricarboxybenzene, dicarboxyanyline and diamino benzoic acid, to which is coupled

b) an affinity ligand via a linker 1 containing hydrogen bonding atoms and chosen from the group consisting of ethers, thioethers, carboxylates, sulfonates, amines, and ammonium groups,

c) a cytotoxic agent, optionally via a linker 2, and

d) an anti-Erb antibody which is trastuzumab ~~or variants thereof having the ability to bind to Erb antigens with an affinity binding constant of at least 5×10^{6} M^{-1}~~, wherein ~~[[in]]~~ an average 2-4 molecules of the part a)-c) above are linked to the anti-Erb antibody,

wherein the affinity ligand is biotin, or a biotin derivative ~~having essentially the same binding function to avidin or streptavidin as biotin~~ selected from the group consisting of norbiotin, homobiotin, oxybiotin, iminobiotin, destibiotin, diaminobiotin, biotin sulfoxide, biotin sulfone, and derivatives thereof having an affinity-binding constant of at least 10^{9} M^{-1} to avidin or streptavidin, wherein stability towards enzymatic cleavage of the biotinamide bond has been introduced in linker 1.

2-3. (Canceled)

4. (Currently amended) The conjugate according to claim 1, wherein the anti-Erb antibody is coupled to the trifunctional cross-linking moiety via a linker 3, and wherein the bond formed between linker 3 and the anti-Erb antibody is either covalent or non-covalent with a binding affinity constant of at least 5×10^{8} M^{-1}.

5. (Currently amended) The conjugate according to claim 1, wherein the cytotoxic agent is a radionuclide, chemotherapeutical ~~agents~~ agent, a synthetic or naturally occurring toxin, an immunosuppressive or immunostimulating ~~agents~~ agent, ~~radiosensitizers~~ a radiosensitizer, an enhancer ~~enhancers~~ for X-ray or MRI or ultrasound, a non-radioactive ~~elements~~ element, which can be converted to a radioactive ~~elements~~ element by means of external irradiation after the anti-Erb antibody carrying said element has been accumulated to specific cells or tissues, or a photoactive compound ~~compounds~~ or a compound ~~compounds~~ used in photo imaging or photodynamic therapy~~, or any other molecule having the same or a similar effect, directly or indirectly, on cancer cells or cancer tissues~~.

6. (Canceled)

7. (Previously presented) The conjugate according to claim 1, wherein when the cytotoxic agent is a radionuclide and is bound to the trifunctional cross-linking moiety via a cytotoxic agent binding moiety.

8. (Currently amended) The conjugate according to claim 7, wherein the cytotoxic agent binding moiety form aryl halides and vinyl halides for radionuclides of halogens, and comprises N_2S_2 and N_3S chelates for Tc and Re radionuclides, ~~amino-carboxy derivatives, preferably~~ EDTA, triethylenetetraaminehexaacetic acid, ~~and~~ DTPA~~, or derivatives thereof, wherein the DTPA derivatives are~~ Me-DTPA, CITC-DTPA, ~~and~~ cyclohexyl-DTPA, ~~and~~ cyclic amines, ~~preferably~~ NOTA, DOTA and TETA~~, and derivatives thereof, for In, Y, Pb, Bi, Cu, Sm and Lu radionuclides, or any other radionuclide capable of forming a complex with said chelates~~.

9. (Previously presented) The conjugate according to claim 7, where in the cytotoxic agent binding moiety comprises DOTA and the cytotoxic agent is ^{90}Y for therapeutic application or ^{111}In for diagnostic application.

10. (Currently amended) The conjugate according to claim 1 ~~claim 6~~, wherein the cytotoxic agent binding moiety comprises DOTA and the cytotoxic agent is ^{177}Lu for both diagnostic and

therapeutic application.

11-17. (Canceled)

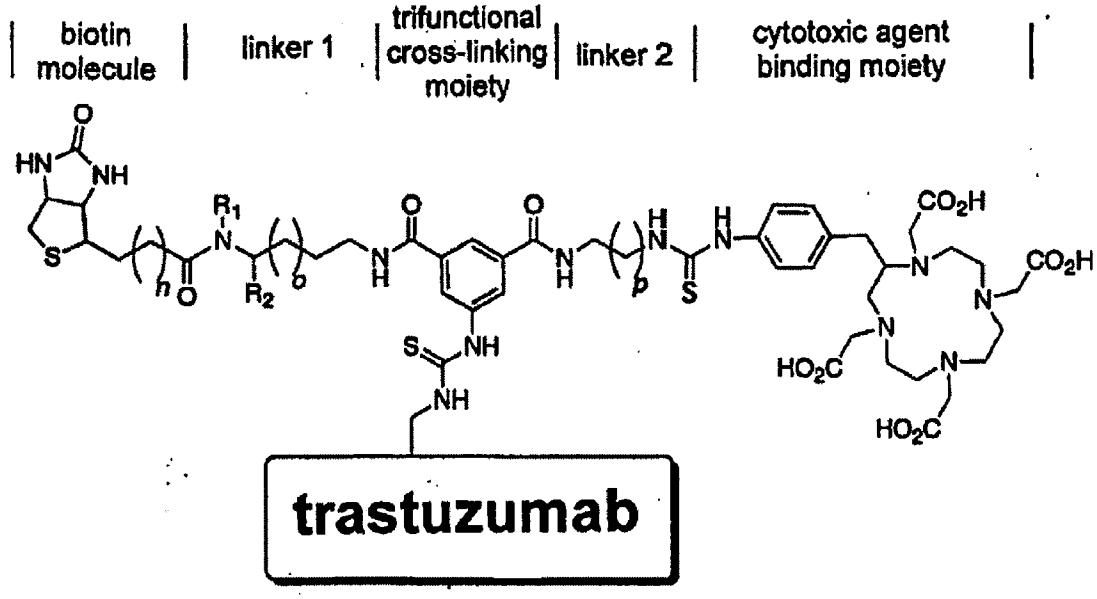
18. (Currently amended) The conjugate according to claim 1, wherein linker 2 provides a spacer length of 1-25 atoms~~, preferably a length of 6-18 atoms~~.

19-20. (Canceled)

21. (Currently amended) The conjugate according to claim 1, wherein linker 3 provides a spacer of a length of 1-25 atoms, ~~preferably~~ a length of 6-18 atoms, or groups of atoms.

22-25. (Canceled)

26. (Currently amended) The conjugate according to ~~any one of the preceding claims~~ claim 1, wherein ~~it is~~ the conjugate is



wherein n is 2-4, o is 1-6, p is 1-6, R_1 is H, and R_2 is —COOH~~, and wherein n preferably is 3, o preferably is 3, and p preferably is 3,~~ bound to a cytotoxic agent via the cytotoxic agent binding moiety.

27. (Currently amended) The conjugate according to claim 1, wherein ~~it is~~ the conjugate is ^{177}Lu-1033-trastuzumab~~;, i.e.~~ ^{177}Lu-3-(13′-thioureabenzyl-DOTA)trioxadiamine-1-(13″-biotin-Asp-OH) trioxadiamine-5-isothiocyanato-aminoisophtalate-trastuzumab; ^{90}Y-1033-trastuzumab; ^{111}In-1033-trastuzumab; 1033-trastuzumab, wherein thioureabenzyl-DOTA has been replaced with maytansinoid; ~~and~~ or 1033-trastuzumab, wherein thioureabenzyl-DOTA has been replaced with doxorubicin.

28. (Currently amended) A medical composition~~, wherein it comprises~~ comprising the conjugate according to claim 1 together with a pharmaceutically acceptable excipient.

29. (Canceled)

30. (Currently amended) A kit ~~for extracorporeal removal of or at least reduction of the concentration of a non-tissue bound medical composition as defined in~~ comprising the composition of claim 28~~, comprising a~~ or the conjugate according to claim 1~~, in the plasma or whole blood of a mammalian host, wherein said medical composition has previously been introduced in the body of said mammalian host and kept therein a certain time in order to be concentrated to the specific tissues or cells by being attached thereto, said kit comprising a) said medical composition, and b)~~ packaged together with an extracorporeal device comprising an immobilized receptor onto which the affinity ligand of the conjugate adheres.

31. (Currently amended) The kit according to claim 30, ~~wherein it comprises~~ and further comprising antibodies, ~~and~~ antigens/haptens, ~~or protein and~~ proteins, cofactors ~~as affinity ligand/immobilized receptor combinations, preferably~~ biotin, ~~[[or]]~~ biotin derivatives selected from the group consisting of norbiotin, homobiotin, oxybiotin, iminobiotin, destibiotin, diaminobiotin, biotin sulfoxide, biotin sulfone, and derivatives thereof having an affinity-binding constant of at least 10^9 M^{-1} to avidin or streptavidin ~~as affinity ligands and~~ avidin or streptavidin ~~as the immobilized receptor~~.

32. (Original) The kit according to claim 30, wherein the affinity ligand is absent in the conjugate of the medical composition, and the immobilized receptor is molecularly imprinted polymers interacting with the conjugate.

33-45. (Canceled)

46. (Currently amended) The conjugate according to claim 1, wherein the anti-Erb antibody variants are any modifications, fragments or derivatives of the anti-Erb antibody having ~~the same or an essentially similar~~ an affinity-binding constant of at least $5x10^6$ M^{-1} when binding to the Erb antigen, said fragments comprising Fab, Fab', ~~F(ab')2~~ $F(ab')_2$, ~~F(ab")~~ F(ab') and Fv fragments; diabodies; single-chain antibody molecules; and multi-specific antibodies formed from antibody fragments.

47. (Previously presented) The conjugate according to claim 1, wherein the cytotoxic agent is a radionuclide, a chemotherapeutical agent, or a toxin.

48. (Currently amended) The conjugate according to ~~claim 10~~ claim 47, wherein the radionuclide is a beta radiation emitter, ~~preferably~~ scandium-46, scandium-47, scandium-48, copper-67, gallium-72, gallium-73, yttrium-90, ruthenium-97, palladium-100, rhodium-101, palladium-109, samarium-153, lutetium-177, rhenium-186, rhenium-188, rhenium-189, gold-198, and radium-212; a gamma emitter, ~~preferably~~ ioidine-131, lutetium-177 and indium-m 114; or alpha radiation emitting materials, ~~preferably~~ bismuth-212, bismuth-213 and astatine-211; as well as positron emitters, ~~preferably~~ gallium-68 and zirconium-89, wherein the chemotherapeutical agent is Adriamycin, Doxorubicin, 5-Fluorouracil, Cytosine arabinoside ("Ara-C"), Cyclophosphamide, Thioptepa, Busulfan, Cytoxin, Taxol, Methotrexate, Cisplatin, Melphalan, Vinblastine, Bleomycin, Etoposide, Ifosfamide, Mitomycin C, Mitoxantrone, Vincristine, Vinorelbine, Carboplatin, Tenisposide, Duanomysin, Carminomycin, Aminopterin, Dactinomycin, Mitomycins, Esperamicins, Maytansinoid, Melphalan and other related nitrogen mustards; and wherein the toxin is an active toxin of bacterial, fungal, plant or animal origin, or fragments thereof.

49. (Currently amended) The conjugate according to claim 1, wherein linker 1 serves as an attaching moiety and a spacer between the trifunctional cross-linking moiety and the affinity ligand~~, preferably a biotin moiety,~~ such that binding with avidin or streptavidin, or any other biotin binding species, is not diminished by steric hindrance.

50. (Currently amended) The conjugate according to claim 1, wherein the stability towards enzymatic cleavage~~, preferably against cleavage by biotinidase,~~ of the biotin amide bond to release biotin has been provided by introducing a methyl group on the biotinamide amine or an alpha carboxylate, a hydroxymethyl, or a methyl group or ethyl group on an atom adjacent~~,~~ ~~preferably less than three carbon atoms apart,~~ to the biotinamide amine.

51. (Currently amended) The conjugate according to ~~claim 16~~ claim 1, wherein the stability towards enzymatic cleavage of the biotin amide bond to release biotin has been provided by introducing ~~in the case of a hydroxymethyl group the stability has been attained by the introduction of~~ a serinyl group~~, and wherein in the case of a carboxyl group the stability has been attained by the introduction of~~ or an α or β aspartyl group.

52. (Currently amended) The conjugate according to claim 18, wherein linker 2 contains hydrogen bonding atoms, ~~preferably~~ ethers or thioethers, or ionisable groups, to aid in water solubilisation.

53. (Previously presented) The conjugate according to claim 1, wherein linker 2 is excluded.

54. (Currently amended) The conjugate according to claim 21, wherein linker 3 contains hydrogen bonding atoms ~~such as~~ selected from the group consisting of ethers or thioethers, or ionisable groups, ~~preferably carboxy- lates~~ carboxylates, sulfonates, ~~[[or]]~~ and ammonium groups, to aid in water solubilisation.

55. (Previously presented) The conjugate according to claim 1, wherein linker 3 is excluded.

56. (Currently amended) The conjugate according to claim 1, wherein more than one affinity ligand~~, preferably two,~~ and/or more than one cytotoxic agent~~, preferably two,~~ also are bound.

57. (Currently amended) The conjugate according to claim 1, wherein ~~[[in]]~~ an average 2.5- 3.5 molecules of the part a) -c) of the conjugate are linked to each anti-Erb antibody.

58. (Currently amended) The medical composition according to claim 28, wherein the excipient is a solution intended for parenteral administration~~, preferably intravenous administration~~.